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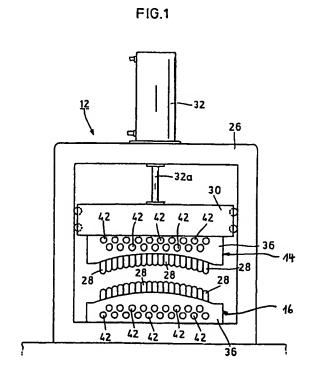
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- (56) Leaf spring cambering method and apparatus.
- (97) Disclosed is a method and an apparatus for cambering a leaf spring by pressing a heated leaf spring material between a pair of molds (14,16), characterized in that said pair of molds each comprise a plurality of mold fingers (28) which can be advanced or retracted relative to the opposite mold by operating a plurality of drive means (42) connected to said plurality of mold fingers based on a predetermined command given from a control means to advance or retract said fingers to required heights, respectively, so that the free ends of the mold fingers as a whole may form a required mold surface; and each mold finger is locked with a releasable locking means (67-69). The cambering apparatus may further comprise a tempering section, in which said pair of molds, together with the cambered leaf spring, are designed to be immersed in the tempering liquid carried in a liquid tank (18) to effect tempering of the cambered leaf spring. Under the new command of cambering leaf springs of different camber specifications, each of the mold fingers of said two molds is connected again to the corresponding drive means (42) and said drive means is operated under the control command from said control means to form likewise a continuous mold surface in accordance with said different specifications.



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P: Intermediate document
T: theory or principle underlying the invention

EUROPEAN SEARCH REPORT

EP 90 11 9182

| Citation of document with indication, where appropriate, | | | | elevant | CLASSIFICATION OF THE | |
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| ategory | of rele | vant passages | to | claim | APPLICATION (Int. CI.5) | |
| X | FR-A-1 190 697 (MORANE) * Figures 1,6-8; page 2, right-hand column, line 30 - page 3, right-hand column, line 41; claims 1,2 * | | 3, | 5 | B 21 D 53/88 | |
| X | DE-C-5 332 38 (HOBRACE * The whole document * | (Τ) | 1-5 | 5 | | |
| X | US-A-1 776 082 (PETERS * Figures 1-4,6; page 1, lines | The state of the s | 1-5 | 5 | | |
| × | US-A-4 212 188 (PINSON) * Figures 2,3,6; claims 1,4; c | | 1,3 | 3-5 | | |
| | | | | | TECHNICAL FIELDS SEARCHED (Int. CI.B) B 21 D | |
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| The Hague 02 August 91 CATEGORY OF CITED DOCUMENTS X: particularly relevant if taken alone Y: particularly relevant if combined with another document of the same catagory A: technological background O: non-written disclosure | | IMENTS E: | E: earlier patent document, but published on, or after the filing date D: document cited in the application L: document cited for other reasons 8: member of the same patent family, corresponding | | | |

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